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The impact of student - centered learning on academic achievement and social skills

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Abstract

The purpose of this research is the effects of student-centered learning on Academic achievement and social skills in 2nd elementary. using a simple random sampling of one class was chosen in SHAHID ATASHDAST SHOUSF School in 2010 and pupils were trained for a month based on Gagne's educational event and David Johnson and Roger Johnson's organized stages of cooperative approach. Prior to doing pattern, teaching of pupils were evaluated by researcher's designed educational questionnaire and researcher's designed observational checklist and group working. After three months, procedures were evaluated and follow-up was performed. The results showed that this approach was successful and effectual as a technique toward teaching pupils in 2nd elementary. According to what have been done, cooperative learning through performance of pupils, provide the opportunity for social acceptance and self-confidence and also improve mental ability.

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1. Introduction

One of the great goals of today's education system which aims at developing and changing is to teach students how to get information through research, instead of giving it to them directly. In this decade, students who are in their childhood; an age of gaining information, ability, skills, attitude and habit should be considered entirely with regard to their physical, mental, psychological aspects and education. No doubt the role of students in the educational activities of pupil's effectiveness of the partnership approach is undeniable. Researchers suggest that the best learning occurred when students get to achieve a concept (Johnson, Johnson, & Smith, 1991).

Student center instruction attempts to engender active learning by using methods such as cooperative learning, open ended assignments, critical-thinking exercises, simulation, and problem-solving activities (Felder & Brent, 1996). Student's responsibility and independence help to develop characteristics of lifelong learners- motivation, self-evaluation, time management and skills to access information. Research in student learning underscores the importance of concentrating on what learners do, and why they think they are doing it, rather than what the teacher does (Biggs, 1990). Over the past decade, cooperative learning has emerged as the leading new approach to classroom instruction. Cooperative learning is an instructional paradigm in which teams of students work on structural tasks (e.g., homework assignments, laboratory experiments, or design projects) under conditions that meet five criteria: positive interdependence, individual accountability, face-to-face interaction, appropriate use of

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collaborative skills, and regular self-assessment of team functioning (Kaufman, Felder, & Fuller, 2000). Many studies have shown that when they implemented correctly, cooperative learning improves information acquisition and retention, higher-level thinking skills, interpersonal and communication skills, and self-confidence (Johnson, Johnson, & Smith, 1998). Cooperative learning is more than just group work. A key difference between cooperative learning and traditional group work is in the latter, students are asked to work in groups without attention to group functioning, whereas in cooperative learning, group work is carefully prepared, planned, and monitored (Jacobs, 1997; Johnson & Johnson, 1994; Ng & Lee, 1996). Positive interactions do not always occur naturally, and social skills instruction must precede and concur with the cooperative learning strategies. Social skills encompass communicating, building and maintaining trust, providing leadership, and managing conflicts (Goodwin 1999). Researchers found that students with disorderly behavior who did not receive social skills instruction, performed better with direct instruction methods rather than cooperative group methods, and those students who did receive social skills instruction performed better with cooperative group methods (Nelson & Johnson, 1996; Prater, Bruhl, & Serna, 1998). Onwuegbuzie (2001) has also reviewed several pieces of literature, which document the positive educational benefits (learning, productivity and time on the task) and social benefits (good attitudes toward school, self-esteem, self-efficacy, motivation, good relationships and regular attendance) of cooperative learning. Though the student - centered learning is attracting worldwide attention of researchers in education, very few studies could be found in the previous research which literature relating to the subject of social studies, especially in Iran. It is, therefore, important to examine the effects of student-centered instruction in technology-based instruction on Academic Achievement and Social Skills among Children's. Objectives of the study were:

1. To expose the experimental group to cooperative learning for teaching of social studies.
2. To measure the achievement of the experimental group after teaching.

2. Method

2.1. Sample and Procedure

This study adopted a pretest–posttest design with one group. The target groups for the study were elementary-school students in South Khorasan in Iran. The sample population was selected one class from students of Shahid Atashdast Shousf School in 2011. Simple sampling random applied in this study. Three times they evaluated within an Academic year. The first evaluation was carried out before a dependent variable and the second after the dependent variable. At the beginning, a pretest taken from all of pupils and then its results evaluated and noted afterwards teaching of whole books performed during a month by experimental procedure which prepared by the scholar. Three months after the experimental procedure, a post-test was taken from whole books by another evaluator (principal of school, manager of school). In the end of academic year, follow-up evaluation has taken from pupils.

2.2. Instrument

A) Questionnaire: instrument for evaluation of pupils includes questions, which designed by teachers based on expectancy and goals of school books. Consequently, written evaluation was accomplished. Validity of test based on content validity proved by five skillful teachers and head of an instructional group of SHOSUF. Reliability of test-retest was 0.87, and oral evaluation via oral question and cooperation of the pupils group was performed based on expectancy and goals of school books. B) Experience: it was in parallel to Implementation of experience of the empirical book that oral question and cooperation of the pupils group based on expectancy and goals of the empirical book have done. Reliability of experiments via test-retest was 0.93. C) Observation: Checklist observation researchers designed was arranged on the basis of six factors on likert of 5. These factors including: classroom skills, communication skills, Adaptive skills with others, friendship skills, tolerate of harsh behavior and cultural skills. Face-validity and construct-validity was supported by four psychological experts. Reliability was 0.67.

2.3. Treatment

In this process, first students based on progression in their credit-course scores are arranged in the order of score from highest to lowest. Then divide into four groups and each of groups has five pupils based on zip method. We

started our base by Gagne's instruction occurrence and organized stages of David Johnson and Roger Johnson's which concentrated on organize structure of lessons. In this pattern utilized three strategies: 1) Competitive strategy: to benefit from the use of competitive strategy, competition was created among groups, such a way that pupils divided into groups and each of groups had five pupils. To ensure from learning each of members after teaching, pupils worked in group activities. 2) Cooperative strategy: to benefit from the use of cooperative strategy, cooperation was utilized among groups. Since SHOUSF is a migratory city and most of the pupils came from vicinity and far villages, we utilized this strategy for pupils to connect with others in a friendly manner. 3) Individual strategy: each of pupils was evaluated in the group, such a way that a collection of instructional instruments was distributed among five groups (each collection equally distributed into groups). The pupils should learn the collection. They learnt to be self-taught and masterly enough. Then pupils planning how should teach to the other members. Each pupil was chosen in random or rotation as a teacher. In this strategy, to improve learning during the reaction the member should ask the question also asks about more explanations wherever peers have vagueness. In this process, rate of learning in instructional material individually evaluated and represented a feedback with progress in commensurate of the group. That is, the group who had a high score, was encouraged. In this approach parents in instruction were involved. During a month, the manners of participating and teaching were educated to members of groups. Furthermore, the brochures were prepared for use of the parent's participating.

3. Finding

Recall that we score our exams one if it's poor, two if fair, three if good, and four if it is excellent. Since the data of this research are based on repetitious testing, and also have collected by each of participants in all stages of variability and interdependence, so the Paired Samples T Test is employed. In order to comparison, the scores of books between pre-test and post-test, Paired Samples T Test is employed. The result is presented in table 1.

TABLE 1. Differences in scores of book students in pretest and posttest

		Paired Differences			t	df	Sig
		Mean	Std. Deviation	Std. Error Mean			
Quran	pretest - posttest	-2.31	.39	.08	-26.00	19	.000
Read and write	pretest - posttest	-1.91	.81	.18	-10.45	19	.000
Mathematical	pretest - posttest	-2.46	.76	.17	-14.39	19	.000
Sciences	pretest - posttest	-1.63	.78	.17	-9.23	19	.000
Heavenly Gift	pretest - posttest	-2.18	.40	.08	-24.40	19	.000

The result of table 1 shows that there is a significant difference between two averages before and after the procedure. The meaning is that the various scores of the pupils after the procedure are higher. The disparity between two averages in each book is high ($df=19$, $P < 0/0005$). Different results in scores of pupils in pre-test and follow-up are listed in table 2. The result of data in table 2 shows that there is a significant difference between pre-test and follow-up. The meaning is that the average sample number (ASN) in different books of pupils in follow-up is higher than the procedure ($df=19$, $P < 0/0005$).

TABLE 2. Differences in scores of book students in pretest and follow-up

		Paired Differences			t	df	Sig
		Mean	Std. Deviation	Std. Error Mean			
Quran	pretest - follow-up	-2.44	.37	.08	-29.01	19	.000
Read and write	pretest - follow-up	-1.96	.77	.17	-11.27	19	.000
Mathematical	pretest - follow-up	-2.50	.72	.16	-15.48	19	.000
Sciences	pretest - follow-up	-1.76	.70	.15	-11.24	19	.000
Heavenly Gift	pretest - follow-up	-2.23	.35	.07	-28.20	19	.000

TABEL 3. Differences in scores of Social Skills before/after the academic year

		Paired Differences			t	df	Sig
		Mean	Std. Deviation	Std. Error Mean			
Classroom skills	BAY - AAY	-2.53	.67	.15	-16.68	19	.000
Communication skills	BAY - AAY	-3.08	.87	.19	-15.78	19	.000
Adaptive skills with others	BAY - AAY	-2.68	.93	.20	-12.77	19	.000
friendship skills	BAY - AAY	-2.89	.69	.15	-18.71	19	.000
tolerate of harsh behavior	BAY - AAY	-2.48	1.05	.23	-10.55	19	.000
cultural Skills	BAY - AAY	-2.71	.57	.12	-21.15	19	.000

Consequently, the difference between two averages is high. So this tells us that pupils did not have any failure by four months after the procedure. Before the Academic year (BAY) and After the Academic year (AAY), Paired Samples T Test was utilized, in order to comparison, the ASN of social skills of pupils is reported in Table 3. The result of table 3 shows that there is a significant difference between two averages before and after the Academic year. The meaning is that the average scores of pupils' social skills after the Academic year are higher. The difference between two averages in each skill is high (df=19, $P < 0/0005$).

4. Discussion

The aim of the Student-centered Learning (SCL) of pupil is to effect of academic achievement and social skills in 2nd elementary. The results after the SCL performance in this research showed that despite the low-age pupils, this approach like its performance has a high effective influence on the other ages in schools. It also clarified that the Students play the active role in this pattern as a part of their final year. The students get involved in a new experience by fulfilling their responsibility or projects in class and instructors have another manner of performing student-centred approach of teaching. Furthermore learners are given direct access to the knowledge-base and work individually and in small groups to solve authentic problems. Parents and community members also have direct access to teachers and the knowledge base and playing an integral role in the schooling process, and Student members in the role of teacher has a direct access to teacher. This result along with varieties of finding has a common purpose (e.g., Hirumi, 2002; Prince, 2004; Toh, 2003). According to the result of this research, the ASN in progressive social skills after the procedure was noticeably high. It could be concluded that this pattern is effective on progressive social skills in 2ed elementary. According what have indicated, SCL assert fourth stage of Erikson's theory Industry vs. Inferiority. During this stage, children become capable of performing of increasing complex tasks. As a result, they strive to be master in new skills. Children who are encouraged and commended by parents and teachers, grow a feeling of competence and self-belief in their skills. Pupils who got little or no encouragement from parents, teachers, or peers find their ability in doubt to be success. Children need to cope with new social and academic demands. Success leads to a sense of competence, while failure results in feelings of inferiority (Erikson, 1963). Hence, the instructive approaches could have a positive or negative effect on progressive function of individuals and made them more practicable and glory, or on the contrary, it appears unsatisfactory behaviors and followed by the psychological interference would be increased.

Besides, according to this research's results in the ASN academic achievement of pupils after the procedure were exceedingly changed. Therefore, in conclusion, this result for academic achievement of pupils is very effective in 2nd elementary. This research agrees with many researchers (e.g., kramati, 2007; Keramati & Hosseini, 2008; Pinzker, 2001, Bernero, 2000).

Student-centered classroom initiated into the teacher's subject matter, and teacher discussed about. Student familiarizes with new innovations about the subject matter after that group discusses about the given problems and probe into groups to find out its solutions. If learning accompanied by activities and discoveries and creating small groups and then attending to personal differences, it made the person more powerful in logic and finding the

solutions. Group working takes away their boringness in the classroom and enhances learner participation to solving the problems and reduces learner stress, at the time of exam and also making their self-confidence much better. In interaction approach students learning who to learn as well. Since students can teach others whatever they learnt, their learning became much better than just listening or reading alone. Moreover, significant social skills, speaking, listening, logic and solving the problem are reinforced with experiential interaction. Representing of active techniques and teaching them to teachers and clarifying the benefits of the instructional atmosphere based on cooperative, facilitate instruction and determined the students in parallel to their knowledge acquisition for awareness and its usage for daily life and lovely sense of existence and togetherness, and ultimately make them fruitful and continuous diligent to upgrade their society. In short, students construct their own meaning by talking, listening, writing, reading, and reflecting on content, ideas, issues and concerns (Meyers & Jones, 1993).

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